

REMARKS

Claims 15-21 are pending in the present application and stand rejected. Claim 15 has been amended. Claims 22-25 have been added. The Examiner's reconsideration is respectfully requested in view of the above amendment and the following remarks.

Claims 15, 17 and 19 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kaganowicz (U.S. Patent No. 5,011,268) (hereinafter "Kaganowicz").

Claims 16 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Onuma et al. (U.S. Patent No. 5,353,141) (hereinafter "Onuma").

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaganowicz and Chaudhari et al. (U.S. Patent No. 6,195,146) (hereinafter "Chaudhari").

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaganowicz in view of Fayet et al (WO 99/19229) (hereinafter "Fayet"). The rejection to claim 21 is traversed.

Kaganowicz does not disclose "the constituent materials having a stoichiometric ratio adjusted by an amount of material, the amount determined to provide a given pretilt angle," as claimed in claim 15. Kaganowicz discloses that "[t]he use of *glow discharge processes*...yields alignment layers which have the required tilt angle." (Kaganowicz, col. 3, lines 25-30). Although Kaganowicz states that the glow discharge processes deposit silicon based inorganic materials onto the electrodes of the substrates, it does not disclose that the amount of material is "*determined to provide a given pretilt angle*," as claimed in claim 15.

Accordingly, claim 15 is believed to be patentably distinguishable over Kagnowicz. Claims 16-19, 22 are believed to be allowable for at least the reasons given for claim 15. Withdrawal of the claim rejections to claims 15-19, 22 is respectfully requested.

Claim 21 is allowable for at least the reasons provided above, and for the following additional reasons. The Examiner admits that Kaganowicz fails to teach “an amount of material for adjusting a stoichiometric ratio of the constituent materials of the alignment layer, wherein the amount is determined to provide a given pretilt angle of the alignment layer different than the preexisting pretilt angle of the alignment layer,” as claimed in claim 21. Accordingly, the Examiner cites col. 6, lines 9-15 of Fayet. Applicants respectfully disagree.

Fayet teaches that by regulating the quantity of oxygen in the gas mixture that is fed into a vacuum chamber, it is possible to control the chemical reaction within the vacuum chamber so that the thus-formed silicon oxide can have a formula SiO_xC_y , in which x and y are within certain ranges. However, Fayet clearly does not teach “*wherein the amount is determined to provide a given pretilt angle of the alignment layer different than the preexisting pretilt angle of the alignment layer.*”

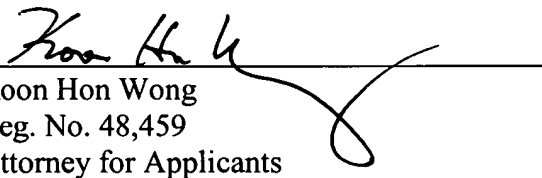
One reason Fayet simply cannot teach the recited portion of claim 21 is that Fayet is entirely non-analogous art. The presently claimed invention is directed to a *liquid crystal display device*. On the other hand, Fayet is directed to a *packaging laminate material*. It is unclear how Fayet can even be applied to the presently claimed invention, or logically combined with Kaganowicz, without the use of impermissible hindsight reasoning. Indeed, the reliance on non-analogous art strongly indicates the use of impermissible hindsight reasoning.

Accordingly, claim 21 is believed to be patentable distinguishable and nonobvious over the combination of Kaganowicz and Fayet. Claim 22 is believed to be allowable for at least the reasons given for claim 21. Withdrawal of the claim rejections to claims 21, 23 is respectfully requested.

Newly added claims 24-25 are believed to be in allowable condition.

In view of the foregoing remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

By: 
Koon Hon Wong
Reg. No. 48,459
Attorney for Applicants

F. CHAU & ASSOCIATES, LLC
130 Woodbury Road
Woodbury, NY 11797
Telephone: (516) 692-8888
Facsimile: (516) 692-8889